

# OCC-DVC

# Dynamic VAR Compensator

Control grid voltage precisely, autonomously



[www.onecyclecontrol.com](http://www.onecyclecontrol.com)

## BENEFITS

- Hardware enabled control
  - Ultrafast, precise, and stable
- Simple graphical user interface
  - Low maintenance & low service
- Small footprint
  - Easy to site
- Modular plug & play architecture
  - Scalable
- Long life design
  - Low logistics & installation cost
- Light weight minimum raw material usage
  - Environmentally friendly
- ETL listed OCC - VAR module
  - Safe and high quality
- Department of Energy sponsored and award winning
  - Highly competitive

## FEATURES

- ✓ One-Cycle Control Technology
- ✓ Ultra-fast bidirectional VAR control ( $\pm 240\text{kVAR}$ )
- ✓ Regulate voltage within a band (e.g.  $\pm 1\text{V}$ )
- ✓ Manual or remote voltage set point control
- ✓ Autonomous grid “reflexes”
- ✓ Web accessible graphical user interface
- ✓ Installation on a standard 4’x4’ transformer pad
- ✓ 400Hz or variable frequency by custom order
- ✓ Modular scalable to MVAR

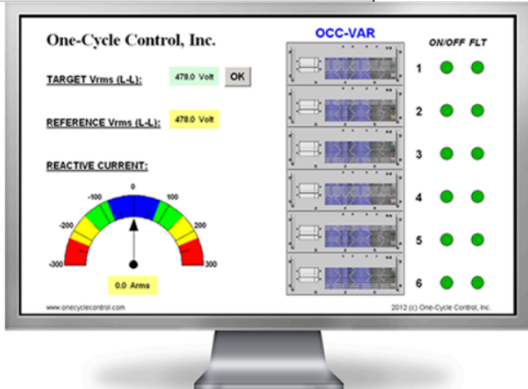
## OVERVIEW

First time in history, grid voltage can be controlled to a setpoint within  $\pm 1\text{V}$ . OCC-DVC leverages unique patented technology from Caltech & the University of California and the experience of the world-leading experts in power electronics. OCC-DVC delivers ultra-fast, precise, reliable, and autonomous voltage regulation with a simple user interface and small footprint. OCC-DVC enables local voltage “reflexes” and wide-area voltage profile optimization. OCC-DVC is now in commercial service on the US grid.

## APPLICATIONS

- Increase renewable penetration by real-time distribution voltage control
- Reduce equipment damage & disruption by stabilizing facility voltage
- Improve grid resilience by autonomous voltage-control
- Improve grid efficiency by voltage-profile optimization
- Fast “reflexes” stabilize rapid-dynamic micro-grids
- Collaborate with LTC/SCB to reduce their cycling

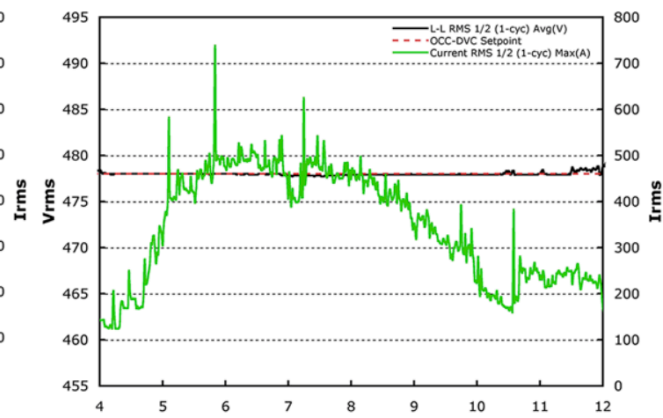
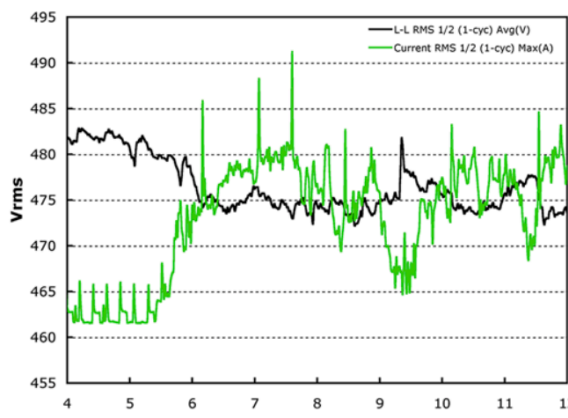
	GTI3050A6480/8002IR	GTI3050A5380/6352IR	GTI3100A6208/3652IR
<b>Electrical Specification</b>			
AC Phase / Wires	3 Phase / 3 Wires		
AC Freq Range (Hz)	57 - 63	47 - 53	57 - 63
AC Voltage Range (V, rms) Line-to-Line	400 - 552	320 - 440	175 - 240
Max AC Current (A, rms)	300		600
Efficiency @ Full Power	> 97%		
AC Current THD @ Full Power	< 5%		
<b>Environment Specifications</b>			
Operating Temp. (°C)	0 to 40		
Operating Relative Humidity w/o Condensation	0 - 95%		
Storage Temp. (°C)	-10 to 55		
<b>Safety</b>			
UL 508C	ETL Listed		



↑ Web accessible graphical user interface



↑ OCC-DVC on US grid



**OFF** ↔ **ON**